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(54) Title: METHOD AND APPARATUS FOR MIXING SAMPLE AND REAGENT IN A SUSPENSION FLUID

(57) Abstract: Discrete samples (13, 13a) are introduced into a mixing chamber containing a carrier fluid (5), so that the samples (13, 13a) move from an inlet (4) to an outlet (7) of the mixing chamber. One or more reagents (12, 12a, 14, 14a) are also introduced into the mixing chamber, which move from the inlet (4) to contact and mix with the corresponding samples (13, 13a) at a location (15) in the mixing chamber, to form respective processed samples (16, 16a, 16b, 16c) for further processing or analysis. The location of contact (15) is predetermined by predetermining the rate of movement of the samples (13, 13a) and of each reagent (12, 12a, 14, 14a). The method and apparatus permit rapid automated processing, are suitable for very small sample and reagent volumes (eg, 100 nanolitres), and minimize contamination.

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